
[illegible]

1. BREAK ALL SHARP CORNERS (.015/.03).

 <b>RED BARN MACHINE</b>			
TITLE		KSTCAS## SERIES SWAGING TOOL; LOCATING PIN	
DWG NO.		TOOL# (see chart)-15	REV 1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± .5°		DRAWN BY: <b>PERRITT</b> APPROVED HEAT TREAT FINISH SPEC <b>BLACK OXIDE</b> USED ON BEARING <b>SEE Pg. 1</b>	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING			
SCALE	N.T.S.	DATE	8-13-08
		SHEET	9 of 9

The technical drawing consists of two main views: a front view on the left and a section view on the right.


**Front View:**


- A circular part labeled "SECONDARY SEAT".
- Feature A points to the outer cylindrical surface.
- Feature B points to the inner cylindrical surface.
- Dimension ØB P.D. indicates the pitch diameter of the internal thread.
- Text "REAM Ø.249 P.F. -15" describes the reamed hole.
- A feature control frame at the bottom left contains the symbols for concentricity, position (.005), and features A and B.
- A circled number "-13" is located below the part name.

**Section View (SECTION A-A):**

- Shows the cross-section of the part.
- Top dimensions: .238 and .218.
- Left side features: R.005 MAX. and a chamfer dimension of .020/.010 x 45°.
- Right side features: a chamfer dimension of .030/.010 x 45° (x2) and a vertical dimension of 1.000 / .980.
- Internal features: a hole with a diameter tolerance of .002 C and a depth of 25.0° / 24.5°.
- Surface texture symbol: // .002 C.
- Section label "SECTION A-A" is at the bottom.

1. BREAK ALL SHARP CORNERS (.015/.03).

 <span style="font-size: 2em; font-weight: bold;">RED BARN MACHINE</span>			
TITLE <span style="font-size: 1.5em;">KSTCAS## SERIES</span> <span style="font-size: 1.5em;">SWAGING TOOL; SECONDARY SEAT</span>			
DWG NO. <span style="font-size: 1.5em;">TOOL# (see chart)-13</span>			REV <span style="font-size: 1.5em;">1</span>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES  TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS 1/32 ANGLES ± 5°		DRAWN BY: <span style="font-size: 1.2em;">PERRITT</span>  APPROVED HEAT TREAT FINISH SPEC <span style="font-size: 1.2em;">BLACK OXIDE</span>  USED ON BEARING <span style="font-size: 1.2em;">SEE Pg. 1</span>	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES 015 x 45° PR. 015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		SCALE <span style="font-size: 1.5em;">NTS</span> DATE <span style="font-size: 1.5em;">8-13-08</span> SHEET <span style="font-size: 1.5em;">8 of 9</span>	

 <b>RED BARN MACHINE</b>			
<b>TITLE</b> KSTCAS## SERIES SWAGING TOOL; PRIMARY SEAT			
<b>DWG NO.</b> TOOL# (see chart)-11			<b>REV</b> 1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: .XXX ± .005 .XX ± .01 X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°		<b>DRAWN BY:</b> PERRITT <b>APPROVED</b> HEAT TREAT FINISH <b>BLACK OXIDE</b> SPEC USED ON BEARING <b>SEE Pg. 1</b>	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING			
<b>SCALE</b> NTS	<b>DATE</b> 8-13-08	<b>SHEET</b> 7	of 9

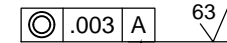


NOTES

1. BREAK ALL SHARP CORNERS (.015/.03).

NOTES


1. BREAK ALL SHARP CORNERS (.015/.03).

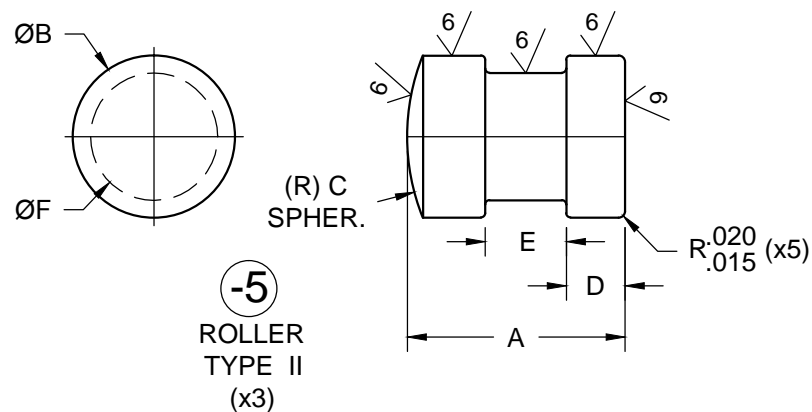



## GUIDE

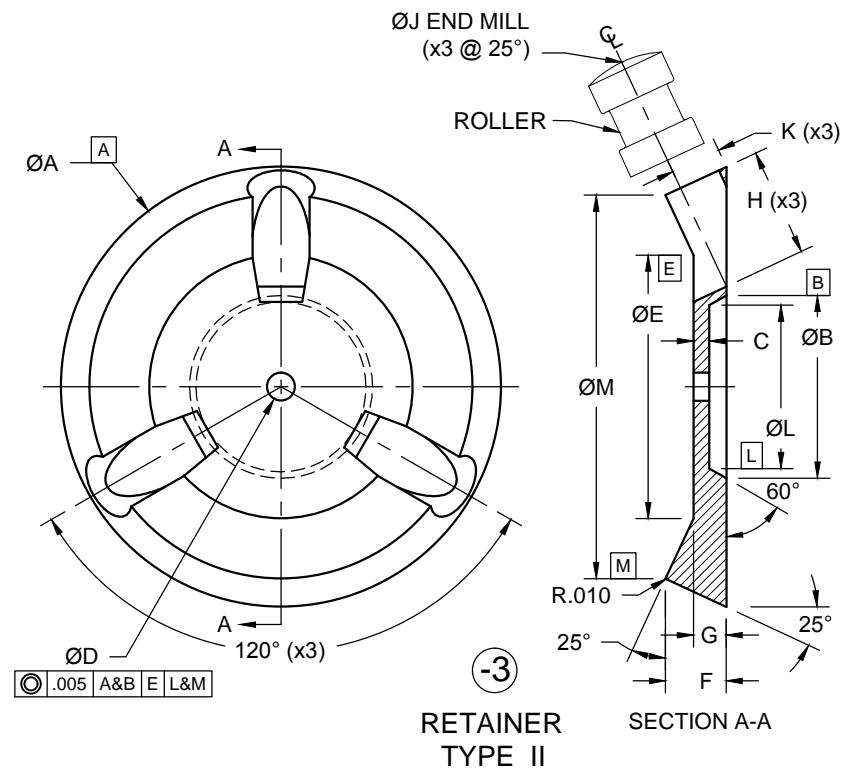
NOTES

1. BREAK ALL SHARP CORNERS (.015/.03).


 <b>RED BARN MACHINE</b>	
<b>TITLE</b> KSTCAS## SERIES SWAGING TOOL; GUIDE	
<b>DWG NO.</b> TOOL# (see chart)-7	<b>REV</b> 1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES  <b>TOLERANCES ON:</b> DECIMALS .XXX ± .005 .XX ± .01 .X ± .1  FRACTIONS ± 1/32 ANGLES ± 5°	<b>DRAWN BY:</b> PERRITT
	<b>APPROVED</b>
	<b>HEAT TREAT</b>
	<b>FINISH SPEC</b>
	<b>USED ON BEARING</b>
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 ± 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	<b>SEE Pg. 1</b>
<b>SCALE</b> NTS	<b>DATE</b> 8-13-08
<b>SHEET</b> 5 of 9	

[illegible]

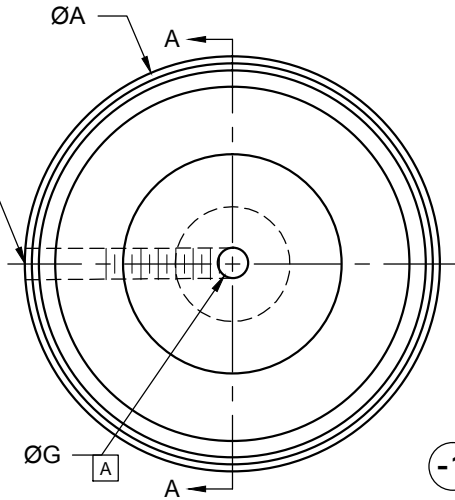
 <b>RED BARN MACHINE</b>	
<b>TITLE</b> KSTCAS## SERIES SWAGING TOOL; ROLLER (QTY. 3)	
<b>DWG NO.</b> T.OOL# (see chart)-5	<b>REV</b> 1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	DRAWN BY: <b>PERRITT</b> APPROVED HEAT TREAT FINISH SPEC
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR. .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON BEARING <b>SEE Pg. 1</b>
<b>SCALE</b> NTS	<b>DATE</b> 8-13-08
<b>SHEET</b> 4 of 9	

[illegible]

1. BREAK ALL SHARP CORNERS (.015/.03).

 <b>RED BARN MACHINE</b>	
<b>TITLE</b> KSTCAS## SERIES SWAGING TOOL; RETAINER	
<b>DWG NO.</b> TOOL# (see chart)-3	<b>REV</b> 1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	<b>DRAWN BY:</b> PERRITT <b>APPROVED</b> HEAT TREAT FINISH SPEC
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON BEARING SEE Pg. 1
<b>SCALE</b> NTS	<b>DATE</b> 8-13-08
<b>SHEET</b> 3	<b>OF</b> 9

REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	-1 CH'D TOL. (H) WAS +/- .002 IS +/- .005.	6/17/13	BIM	GE




①-1



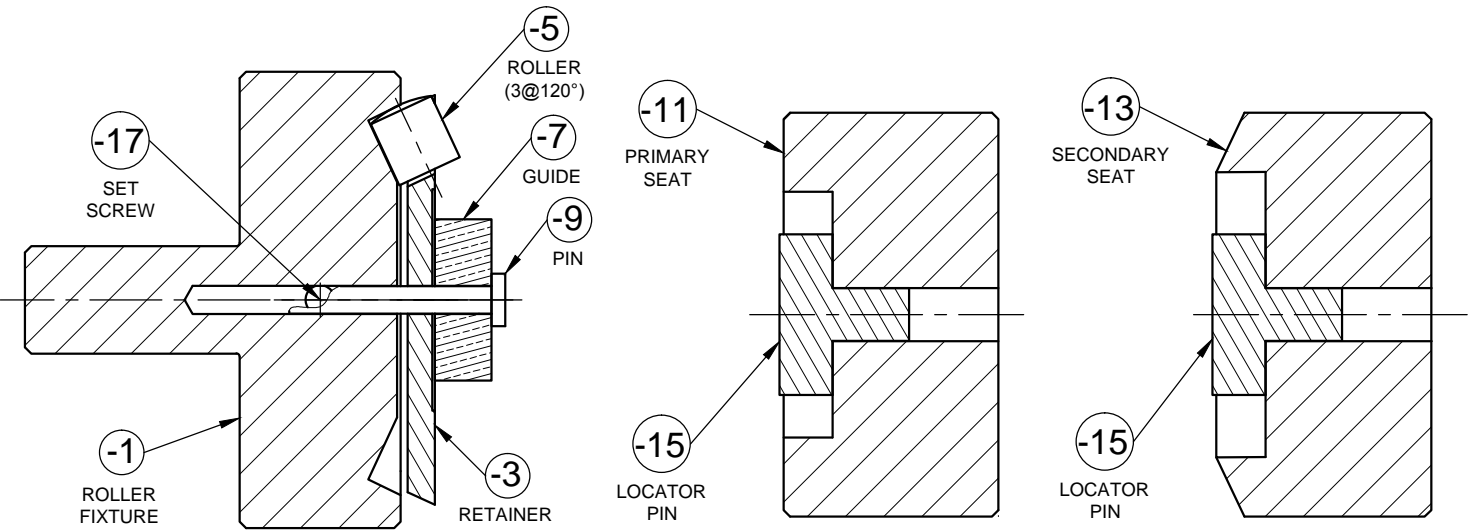
1. BREAK ALL SHARP CORNERS (.015/.03).
2. DIMENSION TO BOTTOM OF R.016 = H DIM.;  
DIMENSION TO SHARP CORNER= H DIM+.005.
3. -1 BEARING RACE SURFACES MUST HAVE  
SMOOTH APPEARANCE, FREE FROM  
MACHINING MARKS AND GROOVES.
4. DO FIRST ARTICLE INSPECTION  
BEFORE HEAT TREATING.

[illegible]

 <b>RED BARN MACHINE</b>			
TITLE		KSTCAS## SERIES	
		SWAGING TOOL; ROLLER FIXTURE	
DWG NO.	TOOL# (see chart)-1		REV 1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°		DRAWN BY: <b>PERRITT</b> APPROVED HEAT TREAT FINISH SPEC <b>RC 55-60 BLACK OXIDE</b>	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 X 45° PR. 015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		USED ON BEARING <b>SEE Pg. 1</b>	
SCALE	<b>N.T.S.</b>	DATE	<b>8-13-08</b>
		SHEET	<b>2 of 9</b>



REVISIONS						
REV	DESCRIPTION			DATE	INITIAL	APPROVED
1	-1 CH'D TOL. (H) WAS +/- .002 IS +/- .005.			6/17/13	BIM	GE



NOTES


1. -5 ROLLERS MUST TURN FREELY IN -3 RETAINER POCKETS.
2. -5 ROLLERS & -3 RETAINER MUST TURN FREELY WHEN TOOL IS COMPLETELY ASSEMBLED.
3. FLAT END OF ROLLERS MUST FACE TOWARDS THE CENTER OF THE TOOL WHEN ASSEMBLED.

BEARINGS & TOOLS COVERED	
BEARING #	TOOL #
CAS10-31A1-518	KSTCAS10
S251W125-5, CAS12-31A1-518	KSTCAS12

ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	B/O INFORMATION OR SPECIFICATIONS	Pg.
		-1	1	ROLLER FIXTURE	SEE CHART	2
		-3	1	RETAINER	SEE CHART	3
		-5	3	ROLLER	SEE CHART	4
		-7	1	GUIDE	SEE CHART	5
		-9	1	PIN	SEE CHART	6
		-11	1	PRIMARY SEAT	SEE CHART	7
		-13	0 or 1	SECONDARY SEAT	SEE CHART	8
		-15	1 or 2	LOCATING PIN	SEE CHART	9
	B/O	-17	1	SOCKET HEAD SET SCREW	#8-32 x 1/4	N/S

RED BARN MACHINE			
TITLE		KSTCAS## SERIES	
DWG NO.		TRI-ROLLER SWAGING TOOLS	
TOOL # (SEE CHART ABOVE)		REV 1	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		DRAWN BY: PERRITT	
TOLERANCES ON:		APPROVED	
DECIMALS		HEAT TREAT LISTED PER ITEM	
.XXX ± .005		FINISH LISTED PER ITEM	
.XX ± .01		USED ON BEARING	
.X ± .1		SEE ABOVE	
UNLESS OTHERWISE SPECIFIED		1. BREAK ALL SHARP EDGES	
.015 x 45° PR .015 R		2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE	NTS	DATE	8-13-08
SHEET		1 of 9	

[illegible]

 <span style="font-size: 48pt; font-family: serif;">RED BARN MACHINE</span>			
TITLE			
DWG NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°		DRAWN BY: <b>PERRITT</b> APPROVED HEAT TREAT FINISH SPEC	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		USED ON MODEL	
SCALE	NTS	DATE	8-15-07
		SHEET	1 of 1

NOT APPROVED FOR PRODUCTION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

PART #	QTY	DESCRIPTION
-1	1	--

DRAWN BY: PERRITT	<div><div>RB</div>RED BARN MACHINE</div>		
CHECKED	TITLE		
HEAT TREAT FINISH SPEC	TITLE		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1	FRACTIONS ± 1/32 ANGLES ± .5°		REV.
USED ON MODEL ?	DWG NO. PART #		
	SCALE NTS	DATE 1-28-06	SHEET 1 of 1
	UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		